

CLAIMS

What is claimed is:

- 5 1. A sound-absorbing material for a vehicle's lower portion, wherein the material is attached to a bottom edge of a periphery of a lower portion of a door of the vehicle, said material being equipped above a seal member which makes a resilient contact with a body panel of the vehicle
10 and carries out a seal between the inside and the outside of the vehicle, said material being made of a foam having a specific gravity of about 0.05-0.4, and said material being able to restrain noise.
- 15 2. A sound-absorbing material for a vehicle's lower portion as claimed in claim 1, wherein said material is formed to make no contact with a door panel while the door is closed.
- 20 3. A sound-absorbing material for a vehicle's lower portion as claimed in claim 1, wherein said material comprises a plurality of protrusions on the surface thereof.
- 25 4. A sound-absorbing material for a vehicle's lower portion as claimed in claim 1, wherein said material comprises a hollow part along the longitudinal direction thereof.
- 30 5. A sound-absorbing material for a vehicle's lower

portion as claimed in claim 4, further comprising at least one of a particulate powder or a fibrous material disposed within the hollow part.

5 6. A sound-absorbing material for a vehicle's lower portion as claimed in claim 2, wherein said material comprises a plurality of protrusions on the surface thereof.

10 7. A sound-absorbing material for a vehicle's lower portion as claimed in claim 2, wherein said material comprises a hollow part along the longitudinal direction thereof.

15 8. A sound-absorbing material for a vehicle's lower portion as claimed in claim 3, wherein said material comprises a hollow part along the longitudinal direction thereof.

20 9. A sound-absorbing material for a vehicle's lower portion as claimed in claim 6, wherein said material comprises a hollow part along the longitudinal direction thereof.

25 10. A sound-absorbing material for a vehicle's lower portion, wherein the material is attached to a bottom edge of a periphery of a lower portion of a door of the vehicle, said material being equipped above a seal member which makes a resilient contact with a body panel of the vehicle
30 and carries out a seal between the inside and the outside

of the vehicle, said material comprising a sound absorption layer made of a foam having a specific gravity of 0.05-0.4, and a noise insulation layer having a specific gravity of 0.4 or more, and said material being able to restrain
5 noise.

11. A sound-absorbing material for a vehicle's lower portion as claimed in claim 10, wherein said material is formed to make no contact with a door panel while the door
10 is closed.

12. A sound-absorbing material for a vehicle's lower portion as claimed in claim 11, wherein said material comprises a plurality of protrusions on the surface
15 thereof.

13. A sound-absorbing material for a vehicle's lower portion as claimed in claim 10, wherein said material comprises a plurality of protrusions on the surface
20 thereof.

14. A sound-absorbing material for a vehicle's lower portion as claimed in claim 13, wherein said material comprises a hollow part along the longitudinal direction
25 thereof.

15. A sound-absorbing material for a vehicle's lower portion as claimed in claim 12, wherein said material comprises a hollow part along the longitudinal direction
30 thereof.

16. A sound-absorbing material for a vehicle's lower portion as claimed in claim 11, wherein said material comprises a hollow part along the longitudinal direction thereof.

17. A sound-absorbing material for a vehicle's lower portion as claimed in claim 10, wherein said material comprises a hollow part along the longitudinal direction thereof.

18. A sound-absorbing material for a vehicle's lower portion, which is attached to a bottom edge of a periphery of a lower portion of a vehicle door,

said material being provided above a seal member which makes a resilient contact with a body panel of the vehicle and which carries out a seal between the inside and the outside of the vehicle, and

said material comprising a foam having specific gravity of about 0.05-0.4, and said material restraining penetration of noise into and out of the vehicle.

19. A sound-absorbing material for a vehicle's lower portion as claimed in claim 18, wherein said material is formed to be spaced from and to make no contact with a body panel of the vehicle when the door is closed.

20. A sound-absorbing material for a vehicle's lower portion as claimed in claim 19, wherein said material comprises a plurality of protrusions on an outer surface

thereof.

21. A sound-absorbing material for a vehicle's lower
portion as claimed in claim 20, wherein at least some of
5 said plurality of protrusions face said body panel of the
vehicle.

22. A sound-absorbing material for a vehicle's lower
portion as claimed in claim 18, wherein said material
10 comprises a plurality of protrusions on an outer surface
thereof.

23. A sound-absorbing material for a vehicle's lower
portion as claimed in claim 18, wherein said material is
15 elongated and comprises a hollow part extending along the
longitudinal direction thereof.

24. A sound-absorbing material for a vehicle's lower
portion as claimed in claim 19, wherein said material is
20 elongated and comprises a hollow part extending along the
longitudinal direction thereof.

25. A sound-absorbing material for a vehicle's lower
portion as claimed in claim 20, wherein said material is
25 elongated and comprises a hollow part extending along the
longitudinal direction thereof.

26. A sound-absorbing material for a vehicle's lower
portion as claimed in claim 21, wherein said material is

elongated and comprises a hollow part extending along the longitudinal direction thereof.

27. A sound-absorbing material for a vehicle's lower
5 portion as claimed in claim 22, wherein said material is elongated and comprises a hollow part extending along the longitudinal direction thereof.

28. A sound-absorbing material for a vehicle's lower
10 portion as claimed in claim 18, wherein:

said material comprises a sound absorption layer made of said foam having specific gravity of about 0.05-0.4, and a noise insulation layer having specific gravity of about 0.4 or more, and said material restraining penetration of
15 noise into and out of the vehicle.

29. A sound-absorbing material for a vehicle's lower portion as claimed in claim 28, wherein said material is formed to be spaced from and to make no contact with a body
20 panel of the vehicle when the door is closed.

30. A sound-absorbing material for a vehicle's lower portion as claimed in claim 29, wherein said material comprises a plurality of protrusions on an outer surface
25 thereof.

31. A sound-absorbing material for a vehicle's lower portion as claimed in claim 30, wherein at least some of said plurality of protrusions face said body panel of the
30 vehicle.

32. A sound-absorbing material for a vehicle's lower portion as claimed in claim 28, wherein said material comprises a plurality of protrusions on an outer surface thereof.

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33. A sound-absorbing material for a vehicle's lower portion as claimed in claim 28, wherein said noise insulation layer comprises a plurality of noise insulation members extending along the longitudinal direction of said material.

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34. A sound-absorbing material for a vehicle's lower portion as claimed in claim 33, wherein said noise insulation layer is covered by said noise absorption layer.

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35. A sound-absorbing material for a vehicle's lower portion as claimed in claim 28, wherein said noise insulation layer is covered by said noise absorption layer.

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36. A sound-absorbing material for a vehicle's lower portion as claimed in claim 23, further comprising at least one of a particulate powder or a fibrous material disposed within the hollow part.

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37. A sound-absorbing material for a vehicle's lower portion as claimed in claim 32, wherein said material comprises a hollow part along the longitudinal direction thereof.

38. A sound-absorbing material for a vehicle's lower portion as claimed in claim 30, wherein said material comprises a hollow part along the longitudinal direction thereof.

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39. A sound-absorbing material for a vehicle's lower portion as claimed in claim 29, wherein said material comprises a hollow part along the longitudinal direction thereof.

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40. A sound-absorbing material for a vehicle's lower portion as claimed in claim 28, wherein said material comprises a hollow part along the longitudinal direction thereof.

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